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ATTORNEY'S DKT No. 028870-178

APPLICANT David C. Greenspan et al.

PTO-1449

FILING DATE April 28, 2000

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EXAMINER'S	PATENT NO.	DATE	NAME	CLASS	BURGI AGG	FILING
WIN /	6,086,374	Jul.2000	Litkowski et al.	CLASS	SUBCLASS	DATE
	6,083,521	Jul.2000	Acemoglu et al.			
	5,990,380	Nov.1999	Marotta et al.			· · · · · · · · · · · · · · · · · · ·
	5,840,290	Nov.1998	Hench et al.			1 1 1
	5,834,008	Nov.1998	Greenspan et al.			
	5,807,641 500 Paris	Aug.1998	Oku et al.			
7	5,766,611	Jun.1998	Shimono et al.			·····
T	5,753,251	May1998	Burreil et al.			
	5,728,753	Mar.1998	Bonfield et al.			
	5,696,169	Dec.1997	Otsu et al.			
	5,681,872	Oct.1997	Erbe			
	5,681,575	Oct.1997	Burrell et al.			·· <u> </u>
	5,648,301	Jul.1997	Ducheyne et al.			
	5,591,453	Jan.1997	Ducheyne et al.			
	5,536,614	Jul1996	Kondo et al.			
	5,501,706	Mar.1996	Arenberg			
	5,410,016	Apr.1995	Hubbell et al.			
	5,352,715	Oct.1994	Wallace et al.			
	5,340,776	Aug 1994	Paschke et al.			
	5,298,260	Mar.1994	Viegas et al.			•
	5,290,544	Mar.1994	Shimono et al.			
V	5,263,992	Nov.1993	Guire			
l	5,126,141	Jun.1992	Henry			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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APPLICATION NO. 1 APPLICATION

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	U.S. PATENT DOCUMENTS		CUMENTS	. W. J		Service Service				
EXAMINER' S INITIALS	PATENT NO.	DATE	NAME		ł	ASS			FILING DATE	
HUY	5,068,122	Nov.1991	Kokubo et al.		1)	Translat	
1	5,017,627	May1991	Bonfield et al.							
	5,000,746	Mar.1991	Meiss			ackslash				
	4,851,046	Jul.1989	Low et al.							
	4,837,285	Jun.1989	Berg et al.							
	4,788,642	Nov.1988	Suzuki et al.							·
	4,613,502	Sep.1986	Turková et al.	······································						
	4,605,415	Aug.1986	Richez						,	
	4,599,209	Jul.1986	Dautzenberg e	t al.						
	4,539,200	Sep.1985	Quarfoot							
	4,538,603	Sep.1985	Pawelchak et al							
	4,303,066	Dec.1981	D'Andrea							
	4,272,518	Jun.1981	Moro et al.							
	4,103,002	Jul.1978	Hench et al.							
	FOREIGN PATENT DOCUMENTS									
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY		CLASS		SUBCLASS			lation
	00/66086	Nov.2000	WO (PCT/US00	0/11585)	1			1		
	99/13582	Mar.1999	wo							
	98/11853	Mar.1998	WO (PCT/US97/	16732)						
	97/17401	Mar.1994	WO (PCT/US96/	17939)						
	OTHER DOC	UMENTS (In	cluding Author,	Title, Date, Pert	inent	Pag	es, El	c.))) .,	-
	Aydin, M., et al, "I Biomed. Mater. R	Deposition Pro les., 38(1):49-5	file of Antibacteria	l Anodic Silver in R Sons, Inc.) 1997.	oot C	anal S	System	s of Tee	th", J.	
eleus relssin	Barrett, E. P., et a	al., "The Deterr	nination of Pore V	olume and Area Dishem. Soc., 73:373-						
1		e Colloid Cher ton, DC) 1994	mistry of Silica", Ad	dvances in Chemist	ry, Se	ries 2	234 (Ai	nerican	Chemic	al
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	·	CITATION	APPLICANT David C. Greenspan et al.			
		PTO-1449	FILING DATE April 28, 2000	GROUP 1755		
	/	OTHER DOCUMENTS (Including Author	r, Title, Date, Pertinent Pag	jes, Etc.)		
1	Xen	Bosetti, M., et al., "Effects of Bioactive Glass 322, (Word Scientific Pub. Co.) 1998.				
		Brinker, C. J., et al., "The Physics and Chem 499-503 (Academic Press, Inc.) 1990.				
	4	Brinker, C. J., et al., "The Physics and Chem 115-119 (Academic Press, Inc.) 1990.				
ᅦ	Mokceleum Missim	319 (Published Monthly by the American Ch	nemical Society) Feb., 1938.			
	Step	Ciba Foundation Symposium 121, 123-139	n as an Essential Trace Element in Animal Nutrition".			
		Cartmell, S. H., et al., "Soft Tissue Response Particulate," J. Mat. Science: Mat. in Med., 9	e to Glycerol-suspended Controlled-release Glass 9: 773-777(Kluwer Academic Publishers) 1998.			
		Coleman, J. J., et al., "Mandibular Reconstrumedline, (Abstract) #91023289, 1991.	uction with Composite Micro	vascular Tissue Transfer",		
		Freed, J. S., "Use of Injectable Biomaterials Sphincter", . Chemical Abstract, 119: #19570	for the Repair and Augment 01, 1993.	ation of the Anal		
		Fung, M. C. et al., "Silver Products for Medic 34(1): 119-126 (American Academy of Clinic Centres and Clinical Toxicologist) 1996.	cal Indications: Risk-Benefit cal Toxicology and Europear	Assessment", <i>J. Toxicol.</i> , Association of Poisons		
		Goldman Sachs/U.S. Research, "Advanced Biotechnology)1-30, 1996.	f Degradability of Melt and Sol-Gel Derived Bioglass®			
		Greenspan, D. C., et al., "The Evaluation of In Vitro", Bioceramics, 10: 391-394 (Published)				
		Greenspan, D. C., et al., "Bioactivity and Bio Vitro and In Vivo" Bioceramics, 11: 345-348	degradability: Melt vs. Sol-G (World Scientific Publishing	sel Derived Bioglass® <i>In</i> Co.) 1998.		
		Grier, N., "Mercurials-Inorganic and Organic, Chapter 18", Disinfection, Sterilization and P	, Chapter 17" and "Silver and	d its Compounds, Febiger, 3 rd ed.) 1983.		
Guo, et al., "Preparation and Studies of Bioactive Glass", Chemical Abstracts, v.120: 1994.						
		Hench, L L, , et al., Biomaterials, An Intert				
Hench, L. L., et al., "The Sol-Gel Glass Transformation of Silica", <i>Phase Transitions, A Multinational Journal</i> ", 24-26: 785-834 (Gordon & Breach Science Publishers, S.A.)19						
	V	Hench, L. L. et al., "The Sol-Gel Process", C Society) 1990,	,			
	EXAMINER (shufthing - 01	ATE CONSIDERED 6/16	9/02		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFORMATION DISCLOSURE **CITATION**

PTO-1449

ATTORNEY'S DKT NO. TE (APPLICATION NO. 09/560,475/600/2006

APPLICANT

David C. Greenspan et al.

FILING DATE

	110-14-15	April 28, 2000	GROUP 1755
	OTHER DOCUMENTS (Including Author		
Ster	Hench, L. L., et al., "Biological Applications (Harwood Academic Publishers GmbH) 199	of Bioactive Glasses". Life C	
1	Hench, L. L., et al., "Introduction to Biocera 1-24, (World Scientific) 1993.	mics, Chapter 1", Advanced	Series in Bioceramics, 1:
	Hench, L. L., et al., "Introduction to Biocera 41-47, (World Scientific) 1993.	mics, Chapter 3", Advanced	Series in Bioceramics, 3:
	Hench, L. L., et al., "Introduction to Biocera 63-79, (World Scientific) 1993.	mics, Chapter 4", Advanced	Series in Bioceramics, 4:
	Hench, L. L., et al., "Introduction to Biocera 13: 239-259, (World Scientific) 1993.	mics, Chapter 13", Advanced	Series in Bioceramics,
	Hench, L. L., et al., "Introduction to Biocera 18: 319-334, (World Scientific) 1993.	mics, Chapter 18", Advanced	Series in Bioceramics,
	Hench, L. L., et al., "Bonding Mechanisms a Biomed. Mater. Res., 2: (1)117-141, (John	at the Interface of Ceramic Pr Wiley & Sons, Inc.)1971 or 2	osthetic Materials", <i>J.</i>
	Hench, L. L., "Bioactive Ceramics: Theory a (Butterworth-Heinemann Ltd.) 1994.		
	Jansen, B., et al., "In vitro Evaluation of the Coated Central Venous Catheter", J. Bioma 1994.	Antimicrobial Efficacy and Biater. Appl, 9(1): 55-70 (Technol	ocompatibility of a Silveromic Publishing Co.)
	Jansson, G., et al., "Stimulating Effects of M Production in Human Polymorphonuclear L (Harwood Academic Publishers GmbH) 198	eukocytes", Free Rad. Res. (e Superoxide Anion Comms., 18(2): 87-98
	Kawashita, M., et al., "Preparation of Antiba Method," <i>Bioceramics</i> , 11: 703-706 (World	acterial Silver-Containing Silic Scientific Publishing Co.) 199	a Glass by Sol-Gel 88.
	d Transforming Growth o", J. Bone & Miner.		
	Kelton, P. L., MD, "Skin Grafts", Selected R University Medical Center) 1992.	leadyings in Plastic Surgery,	7(2): 1-25, (Baylor
	Kim, T. N., et al., "Antimicrobial Effects of M SciMat. Med., 9: 129-134 (Chapman & Ha		ydroxyapatite", J. Mater.
EVAMINED	Kokubo, T., et al., "Solutions Able to Reprod Glass-Ceramic A-W ³ ", J. Biomed. Mater. R	Res., 24:721-734 (John Wiley	e Changes in Bioactive & Sons, Inc.) 1990.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	OTUED DOO!		4 4 4				Yes No	
				or, Title, Date, Perti		P 17 Min. Ca.		
Soul	Antibacterial Act Applied Bacterio	ion of Silver I	ons", Lett. A	ite with Readily Ident opl. Microb., 25: 279-) 1997.	afiable Gro -283 (Pub	oups: Relation lished for the	Society for	
·		l., "Kit for in S	itu Formation	of Topical Gel for E	nzyme Re	lease in Wou	ınds",	
	Nogami, M. et al Solution", <i>J. No</i>	l., "Glass Form n-Chryst. Sol	mation Througids, 37: 191-2	gh Hydrolysis of Si(C 201 (North-Holland P	C ₂ H ₅) ₄ Wublishing	ith NH₄ and H Co) 1980.	ICI	
	Pereira, M. M., et al., "Effect of Texture on the Rate of Hydroxyapatite Formation on Gel-Silica Surface", J. Am. Chem. Soc., 78(9): 2463-2368, (Am. Ceramic Soc.) 1995.							
	Pereira, M. M., e P ₂ O ₅ -SiO ₂ ", <i>J. M</i>	et al., "Homog later. Synth. F	eneity of Bioa Proces., 2(3):	active Sol-Gel Derive	ed Glasses b. Co. 199	s in the Syste 94.	m CaO-	
	Pereira, M. M., e Substrates", J. S	et al., "Mechai Sol-Gel Sci. T	nisms of Hydi echnol,, 7: 59	roxyapatite Formatio -68 (Kluwer Academ	n on Poro ic Pub.)19	us Gel-Silica 996.		
	Pérez-Pariente, J., et al., "Influence of Composition and Surface Characteristics on the <i>in Vitro</i> Bioactivity of SiO ₂ -CaO-P ₂ O ₅ -MgO", <i>J. Biomed. Mater. Res.</i> , 170-175, (John Wiley &Sons, Inc.) 1999.							
	Rabinovich, E. M., et al., "Fluorine in Silica Gels", Better Ceramics Through Chemistry II, 251-259 (Brinker, Clark, Ulrich, eds, Materials Research Society, Pittsburgh, PA) 1986.							
	Reese, A. C., et al., "Role of Fibronectin in Wound Healing", Current Advances in Oral and Maxillofacil Surgery, 1: 1-25, (no date).							
	Scalzo, M., et al., "Antimicrobial Activity of Electrochemical Silver Ions in Nonionic Surfactant Solutions and in Model Dispersions", <i>j. Pharm. Pharmacol.</i> , 48(1): 60-63 (The Royal Pharmaceutical Society of Great Britain) 1996.							
1	Shapiro, L., et al., "Ciliary Neurotrophic Factor Combined with Soluble Receptor Inhibits Synthesis of Proinflammatory Cytokines and Prostaglandin-E ₂ in Vitro" Exp. Cell. Res.,, 215 (1): 51-56, (Academic Press, Inc.) 1994.							
EXAMINER	hi ROSH							

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	skip	Shirkanzadeh, N	M., et al., "For er lons." <i>J. Ma</i>	mation of Carb	onate Apatite on C t. in Medicine, 9: 38	alcium Ph	osphata Casi	inge	
,	not relevant missim	Sing, K. S. W., e Reference to the (Blackwell Scien	e Determination	on of Surface A	on Data for Gas/So rea and Porosity" /	lid System Pure Appl.	ns with Specia Chem., 57(4	al): 603-	-619
	Heip	Microorganisms	Plasmia, 27	<u>′(1): 72-79 (Bin</u>	er Resistance, Acci	ic Press. I	nc.)1992.		
1		Stoor, P., et al.,	"Interactions	Between the Fi	ontal Sinusitis-Ass ioceramics, 8: 253	ociated D	athogen Hoo	nophilu	ıs
l	.	Stoor, P. et al., ". Odontol. Scand.	Antibacterial , 56:161-165	Effects of a Bio (Scandinavian	active Glass Paste University Press) 1	on Oral N 998.	/licroorganisn	ns", Acı	ta
	(At color wat)	Chemical Abstra	icts 112: 2405	<u>557, 1990.</u>	e of a Polymer and		_		
ľ	missing	Thompson, M., e	et al., A Hand	book of Inducti	ely Coupled Plasn	na Spectro	ometry, (Black	(ie) 198	B3.
	Ser	Ulich, T. R., et al LIF and LIF Inhib Physiological So	I., "Intratrache pits Acute Infla c.) 1994.	eal Injection of I ammation", Am	PS and Cytokines J. Physiol., 267 (4	, V. LPS II I, pt. ½): L	nduces Expre .442-446 (The	ooion e	of
	missing	von Nägeli, C., " Denkschriften de	Tötliche Wirku Fr Schweiz Na	ung von angebl aturforsch. Ges	ich reinem Wasser ., 33:1-10, 1893.	auf leben	ide Zellen",		
	All	Vrouwenvelder, (Bioactive Glass, 27: 465-475 (Joh	C. A., et al., "I Hydroxylapat nn Wiley & So	Histological and tite, Titanium A ns, Inc.) 1993.	d Biochemical Evalues and Stainless	Steel", J.	Biomed. Mate	er. Res	S.,
L		and rest Criteria	, J. Biomea i	<u>water. Res., 23</u>	lass Powders: Qua (A2): 201-209 (Joh	n Wiley &	Sons, Inc.) 1	989.	
		and Test Criteria", J. Biomed Mater. Res., 23(A2): 201-209 (John Wiley & Sons, Inc.) 1989. Wells, T. N. C., et al, "Mechanism of Irreversible Inactivation of Phosphomannose Isomerases by Silver Ions and Flamazine", Biochemistry, 34(24): 7896-7903 (American Chemical Society) 1993							by 995.
		Wood, S, "Case s (Abstract) 9315	Study: Traum	atic Pressure S	Sore of the Left Late	eral Malled	olus", <i>Medlin</i>	9,	
		Research and Pr	wo Controlled <i>actice</i> , 10(6):	Release of Si 179-188, (Wes	y of Two Antimicro ver Dressings," <i>We</i> staim Biomedical C	<i>ounds: A (</i> orp.)1998	Compendium	of clini	ical
	XAMINER	Zhong, J., et al., '265-268 (Elsevier	"Porous Sol-C	Gel Bioglass® F 97.	From Near-Equilibri	ium Drying	g", <i>Biocerami</i>	cs, 10,	
`	- A JANNA ELZ	WIW KIL		Į DA	TE CONSIDERED	1/10	1/02		1

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line